

**BOARD OF MINERALS AND ENVIRONMENT  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

**Permit No. 98-23**

**PERMIT TO OPERATE A RESOURCE RECOVERY FACILITY  
UNDER THE SOUTH DAKOTA  
AIR QUALITY AND WASTE MANAGEMENT PROGRAMS**

**APPLICANT:** T & R Electric Supply Co., Inc.  
PO Box 180  
Colman, SD 57017

**PERMIT CONTACT:** Wayne Hoeke  
(605) 534-3555

**ISSUE DATE:** March 17, 2005

**EXPIRATION DATE:** March 17, 2010

**GENERAL FACILITY DESCRIPTION**

T&R Electric Supply Company recovers recyclable metals by processing electrical equipment that contained transformer oil with less than 50 parts per million (ppm) polychlorinated biphenyls, hereinafter "PCBs." The transformer oil is sampled and tested for the level of PCBs to ensure that the concentration is less than 50 ppm. The electrical equipment is drained, disassembled, and degreased. The facility recovers recyclable metals by processing drained electrical equipment in a wire reclamation furnace. Electrical equipment includes, but is not limited to, transformers, regulators, and oil switches but does not include cable or wire that is not a component of the electrical equipment. Two spray booths are used to paint rebuilt transformers using an airless electrostatic method.

**POPULATION SERVED**

Municipal electric utilities, rural electric power cooperatives, electric utilities, and other entities which use electrical equipment containing mineral oil.

**TYPE OF PERMIT**

Minor air quality operating permit

Type III solid waste operating permit -- Maximum permitted tonnage: 4,999 tons per year.

## **FACILITY**

Legal Description: 1.) Thompson & Ross Addition to the City of Colman:  
Located in the SW ¼, Section 15, Township 106 North, Range 50 West of the 5<sup>th</sup> PM, Moody County, South Dakota including Hwy right-of –way and out lot A, Lot 1, Lot 2, Lot 3 and Lot 4 except Lot H-1.

2.) Thompson & Ross Second Addition: All of Thompson-Ross Second Addition except Lot 1A, Lot 1B, Lot 3, Lot 4 and Lot H-1. Located in the East half of the SW ¼, Section 15, Township 106 North, Range 50 West of the 5<sup>th</sup> PM, Moody County, South Dakota.

3.) Thompson & Ross Third Addition: The South 620 feet of the East 487.32 feet of the Thompson-Ross Third Addition. Located in the West half of the SW ¼, Section 15, Township 106 North, Range 50 West of the 5<sup>th</sup> PM, Moody County, South Dakota, except Lot A, Lot B and Lot H-1 and except the south 55 feet of the east 487.32 feet of Thompson and Ross Third Addition to Colman, except Lot H-1 of Thompson and Ross Third Addition, in Moody County, South Dakota, and the North 132.86 feet of the south 187.86 feet of the east 13.0 feet of Thompson and Ross Third Addition to Colman, except Lot H-1 of Thompson and Ross Third Addition, in Moody County, South Dakota.

Location: West Highway 34  
Colman, South Dakota

In consideration of information contained within the applications and supplements, the Secretary of the South Dakota Department of Environment and Natural Resources hereby issues T & R Electric Supply Co., Inc. a multimedia permit to operate a resource recovery facility. This permit is issued pursuant to Chapter 34A-1-21 and 34A-6-1.13 of the South Dakota Codified Laws (SDCL).

Steven M. Pirner, Secretary  
Department of Environment and Natural Resources

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## 1.0 STANDARD CONDITIONS

**1.1 Operation of source.** In accordance with Administrative Rules of South Dakota (ARSD) 74:36:04:15(9), the owner or operator shall operate the units, controls, and processes as described in Table #1 and in accordance with the statements, representations, and supporting data contained in the complete permit application submitted July 17, 2003 (air quality), and July 17, 2003 (solid waste), [and the application for a modification to the permit received on December 11, 2008,](#) unless modified by the conditions of this permit. The application consists of the air quality and solid waste application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

**Table #1**  
**Description of Permitted Units, Operations, and Processes**

Identification	Description	Maximum Operating Rate	Control Device
Unit #1	1990 Al-Jon United (model #G-466) multi chambered wire reclamation furnace. The unit is used to process drained electrical equipment that contained transformer oil with less than 50 parts per million polychlorinated biphenyls (PCBs).	5,000 pounds per batch. Each batch takes approximately three hours to complete	The wire reclamation furnace is equipped with an afterburner fired with transformer oil containing PCBs less than two parts per million and distillate oil.
Unit #2	1992 Custom Paint Boot Corporation (model #CPBC402020) paint booth. The unit is used to paint rebuilt transformers using an airless electrostatic spraying method.	42,000 cubic feet per minute at 1.0" at standard pressure	The paint booth is equipped with six, 2 foot by 15 foot polyester fiber filter pads.
Unit #3	2002 J.B.J. (model #JDB-1218-S) paint booth. The unit is used to undercoat rebuilt transformers using an airless electrostatic spraying method.	10,500 cubic feet per minute at 0.25" at standard pressure	The paint booth is equipped with twenty four, 20 inch by 20 inch polyester fiber filter pads.

**1.2 Duty to comply.** In accordance with ARSD 74:36:04:15(12) and SDCL 34A-6-1.21, the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of

any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. This permit does not convey any property rights or any exclusive privilege. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit. This permit does not waive compliance with federal, state, or local laws and ordinances.

**1.3 Property rights or exclusive privileges.** The State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant that the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations.

**1.4 Penalty for violating a permit condition.** In accordance with SDCL 34A-1 and 34A-6, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, fines of not more than \$10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

**1.5 Inspection and entry.** In accordance with SDCL 34A-1-41, 34A-6-1.20, and 34A-11-16, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records that are required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

**1.6 Severability.** In accordance with ARSD 74:36:04:15(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

**1.7 Permit termination, modification, or revocation.** In accordance with ARSD 74:36:04:27 and 74:27:08:23, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 SDCL 34A-6, the federal Clean Air Act, ARSD 74:36, ARSD 74:27, or for nonpayment of any outstanding enforcement penalty.

## **2.0 PERMIT AMENDMENT AND MODIFICATION CONDITIONS**

**2.1 Permit flexibility.** In accordance with ARSD 74:36:04:18, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change. The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, and the proposed changes to this permit.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification can not be constructed until the Secretary takes final action on the proposed change. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

**2.2 Administrative permit amendment.** In accordance with ARSD 74:36:04:20, the Secretary has 15 days from receipt of a written notice to verify that the proposed change is an administrative permit amendment. The Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the source; or
4. Any other change that the Secretary determines to be similar to those requirements in this condition.

**2.3 Minor permit amendment.** In accordance with ARSD 74:36:04:20.04, the Secretary has 90 days from receipt of a written notice to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining that the proposed change is a permit modification. The Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an



alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

**2.4 Permit modification.** In accordance with ARSD 74:36:04:21 and 74:27:09:05, an owner or operator may apply for a permit modification. A permit modification is any proposed change that is not an administrative amendment or a minor permit amendment. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

**2.5 Permit revision.** In accordance with ARSD 74:36:04:24 and 74:27:09:05, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1, SDCL 34A-6, or the federal Clean Air Act.

**2.6 Testing new fuels or raw materials.** In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal that describes the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions that will result from the proposed change; and
3. The proposed schedule for conducting the test.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines that the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

**2.7 Permit transfer.** In accordance with ARSD 74:27:08:21, a new owner shall submit a new certification of applicant form and a written agreement containing a specific date for transfer of operating permit responsibility, coverage, and liability. A permit transfer to a new owner is subject to the same procedural requirements, including public comment, as the original permit issuance, except that the required review and recommendation shall cover only the ownership transfer.

### **3.0 PERMIT RENEWAL**

**3.1 Permit effective.** In accordance with ARSD 74:36:04:05 and SDCL 34A-6-1.16, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

**3.2 Permit renewal.** In accordance with ARSD 74:36:04:06 and 74:27:08:11, the owner or operator shall submit an application for a permit renewal at least 90 days before the date of permit expiration if the owner or operator wishes to continue an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

**3.3 Permit expiration.** In accordance with ARSD 74:36:04:16, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

### **4.0 RECORD KEEPING AND REPORTING**

**4.1 Record keeping and reporting.** In accordance with ARSD 74:36:04:15(10) and 74:27:13:22, the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources  
Air Quality Program  
523 E. Capitol, Joe Foss Building  
Pierre, SD 57501-3181

**4.2 Signatory Requirements.** In accordance with ARSD 74:36:04:07, all applications submitted to the Secretary shall be signed and certified by a responsible official. A responsible official is a responsible corporate officer for a corporation or a general partner or the proprietor for a partnership or sole proprietorship, respectively. All reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

**4.3 Certification statement.** All documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

“I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete.”

**4.4 Record of wire reclamation furnace hours of operation.** In accordance with ARSD 74:36:04:15(10), the owner or operator shall record the number of hours the wire reclamation furnace is operated each day. The hours shall be recorded from the continuous temperature recorder chart. The hours of operation begin when the primary burner is ignited and end when the afterburner is shut off.

**4.5 Record of paint, primer, and solvent usage.** In accordance with ARSD 74:36:04:15(10) and 74:28:23:01, the owner or operator shall maintain records of the amount of paint, primer, and solvent products used per month, the amount of waste generated per month, and a copy of the material safety data sheet (MSDS) for each of the products.

**4.6 Record of hazardous air pollutant emissions.** In accordance with ARSD 74:36:04:15(10), the owner or operator shall calculate the amount of hazardous air pollutants emitted each month. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values. The hazardous air pollutant emissions shall be based on the painting operations described as Units #2 and #3, wire reclamation furnace operations, and any other operation that emits hazardous air pollutants into the ambient air.

The hazardous air emissions from the painting operation will be based on the amount of paint, primer, and solvent products used each month and the composition of the product based on the material safety data sheets, manufacturer supplied formulation data, EPA approved test method data, or a method approved by the Secretary. A list of hazardous air pollutants is included in Appendix A. The records will be used to determine compliance with permit condition 5.5.

Equation 1 shall be used to calculate the hydrogen chloride emissions per month from the wire reclamation furnace:

Equation 1 – Hydrogen Chloride Emission Calculations

$$E_{HCl} = 1.78 \frac{\text{pounds}}{\text{hour}} \times X \frac{\text{hours}}{\text{month}} \div 2,000 \frac{\text{pounds}}{\text{ton}}$$

Where: **X** = time spent, in hours per month, processing electrical equipment in the wire reclamation furnace; and

**E<sub>HCl</sub>** = hydrogen chloride emissions (tons per month).

**4.7 Operational records.** In accordance with ARSD 74:27:08:15, 74:27:13:22, and 74:28:23:01, the owner or operator shall at a minimum, maintain the following records:

1. The amount of solid waste and/or hazardous waste ash generated each month;
2. An annual written estimate of the tonnage of electrical equipment processed;
3. Records of transfer of all ash, plastic, fluff, and other wastes containing PCBs or hazardous waste to an EPA and/or state approved facility that is permitted to accept the specific waste. These records shall include the shipping manifests;
4. Results of all sampling or testing conducted on site or on materials that have been stored on-site;
5. Documentation of any unauthorized waste found at the facility and any action taken;
6. Records of personnel training;
7. Records of any emergency conditions occurring at the facility that are related to the operating conditions of this permit;
8. Documentation that Laboratory Quality Assurance/Quality Control (QA/QC) measures were followed and performed; and
9. Copies of this and any other permits required by state, local, or federal laws and regulations.

**4.8 Closure notification.** In accordance with ARSD 74:27:15:05, the owner or operator shall notify the Secretary in writing of the intent to close the facility at least 90 days prior to closure.

**4.9 Reporting spill or leaks.** The owner or operator shall report all leaks or spills within the building, in excess of 25 gallons of mineral oil, to the Secretary within 24 hours of detection. The owner or operator shall notify the Secretary of any spills or leaks occurring within the state which are subject to reporting under ARSD 74:34:01 -- Regulated Substance List and Reporting of Discharges, consistent with the terms stated therein.

**4.10 Annual reporting.** In accordance with ARSD 74:36:04:15(10), the owner or operator shall submit an annual report to the Secretary by the end of each annual period. The annual report shall contain the following information:

1. Name of facility, permit number, reference to this permit condition, identification of the submittal as an annual report, and calendar dates covered by the reporting period;
2. The hours the wire reclamation furnace was operated each month and the 12-month rolling total for each month within the reporting period;
3. The type and quantity of paints and solvents used during the reporting period that contain hazardous air pollutants;
4. The quantity of hazardous air pollutants emitted each month and the 12-month rolling total for each month within the reporting period and supporting documentation; and

5. A copy of the material safety data sheet, manufacturer supplied formulation data, or EPA approved test method data for any product used at the facility during the reporting period that has not been previously submitted to the Secretary.

The annual report must be postmarked no later than 30 days after the end of the reporting period (January 30).

**4.11 Reporting permit violations.** In accordance with ARSD 74:36:04:15(10), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

The Secretary may waive the written report on a case-by-case basis if the oral report has been received within the reporting period and dependent upon the severity of the permit violation.

## **5.0 CONTROL OF REGULATED AIR POLLUTANTS**

**5.1 Visibility limit.** In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table #1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

**5.2 Visibility exceedances.** In accordance with ARSD 74:36:12:01, an exceedance of the operating limit in permit condition 5.1 is not considered a violation during soot blowing, start-up, shutdown, or malfunctions. A malfunction is described as any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

**5.3 Particulate limits.** In accordance with ARSD 74:36:06:03(1)(a), the owner or operator shall not allow the emission of particulate from the wire reclamation furnace in excess of 0.8 pounds per hour.

**5.4 Sulfur dioxide limits.** In accordance with ARSD 74:36:06:03(2), the owner or operator of any unit that uses combustible fuels shall not allow the emissions of sulfur dioxide to the ambient air in an amount greater than 3.0 pounds of sulfur dioxide per hour per million Btu of heat input to the unit. Compliance with the sulfur dioxide emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods.

**5.5 Hazardous air pollutant limit.** In accordance with ARSD 74:36:04:15(9), the owner or operator shall limit the amount of hazardous air pollutants emitted from the facility to less than 9.5 tons per year of a single hazardous air pollutant or 23.8 tons per year of a combination of hazardous air pollutants during a 12-month rolling period.

**5.6 Wire reclamation furnace -- temperature limit.** In accordance with ARSD 74:36:04:15(9), the owner or operator shall maintain a temperature at or greater than 1,800 degrees Fahrenheit in the afterburner chamber. The minimum temperature of 1,800 degrees Fahrenheit shall be maintained at all times during the operation of the wire reclamation furnace. This includes prior to igniting the batch load in the primary chamber and until all combustibles are completely combusted. Only mineral oil that contains PCBs less than two (2) parts per million or distillate oil shall be used to fuel the afterburner chamber until the minimum temperature has been maintained. Mineral oil that contains PCBs less than fifty (50) parts per million shall be combusted in the afterburner chamber only after the required minimum temperature has been achieved. The fuel system for the afterburner shall be constructed and installed so that if the afterburner temperature falls below the required minimum temperature, the flow of mineral oil with a PCB concentration of less than fifty (50) parts per million shall automatically stop and switch to a fuel with a PCB concentration of less than two (2) parts per million or distillate oil. Use of any mineral oil containing PCB concentrations greater than two (2) parts per million during startup or shutdown of the wire reclamation furnace is prohibited.

**5.7 Residence time.** In accordance with ARSD 74:36:04:15(9), the owner or operator shall maintain the exhaust gases in the afterburner chamber at or greater than 1,800 degrees Fahrenheit for a minimum residence time of two seconds. The thermocouple that measures the temperature in the afterburner chamber shall be located downstream of the burner at a distance that ensures the exhaust gases are maintained at or greater than 1,800 degrees Fahrenheit for a minimum of two seconds.

**5.8 Circumvention not allowed.** In accordance with ARSD 74:36:04:31, the owner or operator may not install, use a device, or use a means that conceals or dilutes an air emission that would otherwise violate this permit. This includes operating a unit or control device that emits air pollutants from an opening other than the designed stack, vent, or equivalent opening.

**5.9 Minimizing emissions.** The owner or operator shall at all time, when practicable, maintain and operate all permitted units in a manner that minimizes air pollution emissions.

## **6.0 PERFORMANCE TESTS**

**6.1 Performance test may be required.** In accordance with ARSD 74:36:11:02, the secretary may request a performance test. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test that is conducted while operating at less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test if circumstances reasonably warrant.

**6.2 Test methods and procedures.** The owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not applicable or required.

**6.3 Submittal of test plan.** In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

**6.4 Notification of test.** In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

**6.5 Performance test report.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

**6.6 Ash characterization.** In accordance with ARSD 74:27:08:15 and 74:28:23:01, the owner or operator shall take representative samples of furnace ash and analyze it to characterize the ash for hazardous waste classification until such time as the Secretary agrees the ash waste stream characteristics have been established. The owner or operator shall perform additional analysis of the ash waste stream when there is any change in the type of feed material. All analyses must be conducted in accordance with the methodologies specified in ARSD 74:28:22:01 and 40 CFR § 261.

**6.7 Used oil specification test.** Used oil burned in the wire reclamation furnace for energy recovery must be tested by the owner or operator to determine whether the oil contains less than ~~two parts per million~~ fifty parts per million PCBs. The owner or operator may test or use other documentation to determine whether the oil is considered on or off specification used oil as ~~and meets the used oil specifications~~ found in ARSD 74:28:27:01(adopting by reference 40 CFR § 279).

## **7.0 CONTINUOUS MONITORING**

**7.1 Wire reclamation furnace -- continuously monitoring temperature.** In accordance with ARSD 74:36:04:15(10), the owner or operator shall install, calibrate, operate, and maintain a device that continuously monitors and records the temperature of the exhaust gases in the afterburner chamber. The thermocouple for the continuous monitoring device shall be located at a distance that ensures the exhaust gases are maintained at 1,800 degrees Fahrenheit for a minimum of two seconds. The continuous monitoring device must have an accuracy of plus or minus 0.75 percent of the measured temperature or 36.5 degrees Fahrenheit, whichever is greater. The continuous monitoring device and recorder shall be operational prior to igniting the primary chamber and at least one hour after the afterburner is shut off.

If the continuous monitoring device or recording equipment is not functional for more than one hour, the owner or operator shall complete the batch cycle and discontinue using the wire reclamation furnace until the continuous monitor and recorder are operational.

## **8.0 OPERATIONAL REQUIREMENTS AND RESTRICTIONS**

**8.1 Acceptance of electrical equipment.** The owner or operator shall accept only undrained electrical equipment containing mineral oil with a PCB concentration less than 50 parts per million for processing in the wire reclamation furnace.

**8.2 Electrical equipment containing equal to or greater than 50 ppm PCBs.** If the owner or operator accepts drained electrical equipment containing mineral oil with a PCB concentration



equal to or greater than 50 parts per million, the owner or operator shall comply with the requirements in 40 CFR § 761.

**8.3 Operational restrictions on wire reclamation furnace.** The owner or operator shall process only drained electrical equipment, for thermal destruction and metal recovery, in the wire reclamation furnace. The owner or operator shall use ~~only~~ either mineral oil that meets the requirements of on-specification used oil as defined in ARSD 74:28:27:01(adopting by reference 40 CFR § 279) and contains PCBs less than ~~two-fifty~~ parts per million or distillate oil, ~~to fuel the wire reclamation furnace or if mineral oil meeting the requirements of off-specification used oil as defined in ARSD 74:28:27:01 (adopting by reference 40 CFR 279) Subpart G and that contains PCBs less than fifty parts per million PCBs, to fuel the wire reclamation furnace. Use of off-specification used oil requires the company must to meet all requirements specified under this chapter for burners of off-specification used oil.~~

**8.4 Inspection for spills or leaks.** In accordance with 40 CFR § 761.65(c)(5), the owner or operator shall inspect storage tanks and electrical equipment for leaks at least once every 30 days.

**8.5 Disposal or recycling of waste and used mineral oil.** In accordance with ARSD 74:27:08:15 and Chapter 74:28, the owner or operator shall dispose of or recycle the following materials contaminated with PCBs or determined to be hazardous waste at a facility approved by EPA and/or the state to accept such waste:

1. Ash from the wire reclamation;
2. Floor dry from transformer salvage process;
3. Other wastes containing PCBs or determined to be hazardous waste that may be generated at this facility;
4. All mineral oil containing two parts per million or greater PCBs; and
5. All mineral oil that does not meet the used oil specification requirement found in ARSD 74:28:27:01 (adopting by reference 40 CFR § 279).

**8.6 Temporary storage of hazardous waste.** In accordance with ARSD 74:28:23:01, wastes determined to be hazardous must be disposed of at a hazardous waste facility within a specified period of time. The temporary storage period is specific to the category of hazardous waste generator and is outlined below:

1. Large quantity generators must transport hazardous waste off-site in 90 days or less;
2. Small quantity generators must transport hazardous waste off-site in 180 days or less, or within 270 days if the waste must be transported over 200 miles. A small quantity generator may not accumulate more than or equal to 6,000 kilograms of hazardous waste at any one time;
3. Conditionally exempt generators are not required to transport hazardous waste off site by a certain period of time unless the generator accumulates 1,000 kilograms of hazardous waste at any one time. Once 1,000 kilograms have accumulated on-site, the temporary storage period for conditionally exempt generators becomes the same as a small quantity generator; and

4. All incinerated materials and ash must be placed in a sealed container during on-site transport in order to prevent unnecessary releases of ash into the environment.

**8.7 Other hazardous waste and used oil requirements.** A hazardous waste generator or an owner or operator that burns used oil for energy recovery shall comply with all the applicable hazardous waste generator and used oil requirements specified in ARSD 74:28, adopting by reference 40 CFR Parts 260 through 279, inclusive.

**8.8 General safety.** The owner or operator shall store, handle, and process all undrained electrical equipment in such a manner as to facilitate inspection and minimize fire hazards. All waste storage area access must be limited to authorized personnel.

**8.9 Storage of electrical equipment.** The owner or operator shall store undrained and drained electrical equipment in a manner that minimizes the impact on the environment.

## **9.0 FINANCIAL ASSURANCE**

**9.1 Financial assurance instrument for closure.** In accordance with ARSD 74:27:16:01, the owner or operator shall submit a financial assurance instrument for closure of the facility. The financial assurance instrument shall be established in accordance with SDCL 34A-6-1.12. The financial assurance amount shall be in an amount sufficient to:

1. Remove and properly dispose of the maximum amount of transformer core and coil assemblies stored on site for processing in the wire reclamation furnace; and
2. Hire a third party to adequately perform the tasks listed above.

**9.2 Adjusting financial assurance amount.** In accordance with ARSD 74:27:16:02, the owner or operator shall adjust the financial assurance amount if operational changes increase or reduce the maximum cost of items listed in permit condition 9.1 at any time during the operating life of this facility. At a minimum, the value of the financial assurance amount shall be adjusted every two years for inflation and disposal cost changes. The Secretary shall be notified in writing when financial assurance adjustments are made.

## **10.0 RECOMMENDATION**

A review of this facility indicates it can operate in compliance with South Dakota's Air Pollution Control rules and the federal Clean Air Act. The Secretary, therefore, recommends that the Board of Minerals and Environment issue this operating permit with conditions to ensure compliance with SDCL 34A-1 and the federal Clean Air Act. Any questions pertaining to the

Secretary's recommendation should be directed to Keith Gestring, Natural Resources Engineer, at (605) 677-6165.

**Attachment A**  
**Variance Approved**  
**T & R Electric Supply Co., Inc. Resource Recovery Facility**

The DENR-WMP specifically recognizes and approves the following variance with the conditions as listed below:

Regulatory Reference ARSD 74:27:11:05 - Distance to residences, other buildings, and roads

State solid waste rules specify that restricted use facilities may not be located within 1,000 feet of an occupied dwelling, school, hospital, interstate or primary road right-of-way, or public park or recreation area. The location may not pose a safety hazard to the public.

State rules allow a variance for restricted use sites provided the facility is operated in a manner that will not threaten homes, other buildings, roads (visibility), or human health or safety.

The T & R Electric Supply Co., Inc. Resource Recovery Facility is located on the north side of Highway 34 and within 1,000 feet of an interstate or improved highway and within 1,000 ft of an occupied dwelling. The operator has demonstrated an ability to operate the facility in a manner that is acceptable. Further, the operational and design requirements of this permit are specifically designed to ensure that operation of the facility, specifically open burning, will not pose a threat.

The operator shall comply with the conditions of this permit.